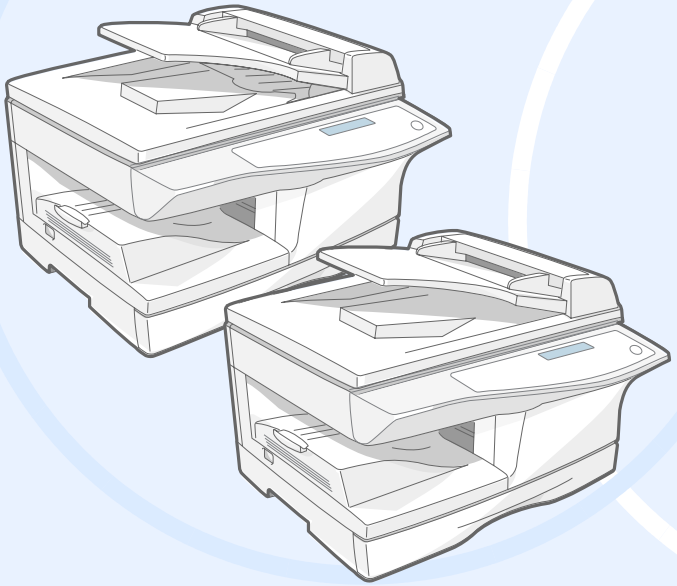
SHARP®

AR-M150/AR-M155
Online Manual



With the RSPF/SPF installed

Start

Click this "Start" button.

Introduction

This manual describes the printer and scanner functions of the AR-M150/AR-M155 digital multifunctional system.

Note

- For information on the following topics, please refer to the Operation Manual for the digital multifunctional system.
  - Basic machine procedures (adding paper, replacing the toner cartridge, removing misfeeds, using peripheral devices)
  - Copier functions
  - Scanning from the operation panel of the machine
  - Specifications
- Where "AR-XXXX" appears in this manual, please substitute the name of your model for "XXXX".
- This manual refers to the Single Pass Feeder as the "SPF", and the Reversing Single Pass Feeder as the "RSPF".
- The SPF and RSPF (for only AR-M155) are the optional equipments. Please read the explanation about the SPF and RSPF in this manual if you have the equipment.
- The screen images and procedures that appear in this manual are mainly for Windows XP. With other versions of Windows, some screen images may be different from those in this manual.
- For information on using your operating system, refer to your operating system's manual or online Help.

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The display screens, messages, and key names shown in the manual may differ from those on the actual machine due to product improvements and modifications.

How to Use the Online Manual

This section explains how to view the online manual. Please read this section before using the online manual.
For information on using Acrobat Reader, see Acrobat Reader Help.

How to Control the Online Manual

In this manual, the following buttons are displayed at the bottom of each page. Click these buttons to move quickly to pages that you wish to view.

CONTENTS

Displays the Contents of this manual. Click on a topic in the Contents to jump directly to that section.

I N D E X

Displays the Index of this manual. Click on a topic in the Index to jump directly to that section.

Takes you forward page by page.

Takes you back page by page.

Following Links

This manual uses a link function that allows you to jump to a related page. If you click green, underlined text, the related page will be displayed. (In the Contents and Index sections, the linked areas are not underlined.)
Example: ☞ Contents
To return to the previous page, click the ⬅ button on the menu bar of Acrobat Reader.

Using Bookmarks

Bookmarks have been created on the left side of this manual. You can click on a bookmark to jump directly to that section.

How to Print Out This Manual

To print this manual, select "Print" from the "File" menu of Acrobat Reader. Select the desired printer settings in the "Print" dialog box, and then click the "OK" button.

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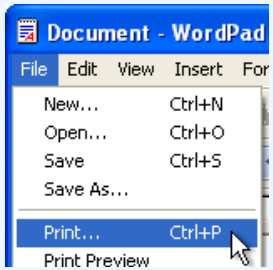
Basic Printing (part 1)

The following example explains how to print a document from WordPad.
Before printing, make sure that the correct size of paper for your document has been loaded in the machine.

1 Start WordPad and open the document that you wish to print.

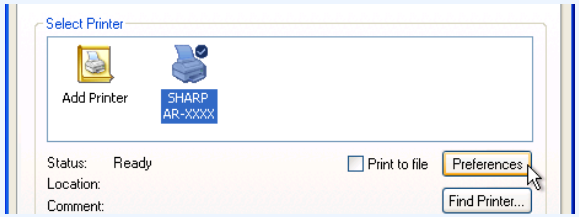
2 Select "Print" from the application's "File" menu.

The "Print" dialog box will appear.



3 Make sure that "SHARP AR-XXXX" is selected as the printer. If you need to change any print settings, click the "Preferences" button ("Properties" button in Windows 95/98/Me/NT 4.0) to open the printer driver setup screen.

The printer driver setup screen will appear.



Windows 2000 does not have the "Preferences" button in this dialog box. Select settings as needed on each of the tabs in the setup screen.

☞Printer Driver Settings, Printing Multiple Pages on One Page, Fitting the Printed Image to the Paper, Printing a Watermark, Two-sided Printing (Only for models that support two-sided printing)

4 Click the "Print" button ("OK" button in Windows 95/98/Me/NT 4.0).

Printing begins. When printing begins, the Print Status Window automatically opens.

☞ Outline of the Print Status Window)

The print job is delivered to the output tray, with the position of the paper offset slightly from the previous job (offset function).

If the tray runs out of paper during printing

Printing will automatically resume when paper is loaded in the tray.
When using the bypass tray, select printer mode with the mode select key on the machine, load paper as instructed by the message in the display, and then press the [START] key to resume printing.

When the 250-sheet paper feed unit is installed:

Note that if the "AUTO TRAY SWITCH" setting in the user programs is enabled and there is the same size of paper in another tray, the machine will automatically switch to the other tray and continue printing.

Cancel a print job

1 **Select printer mode with the [MODE SELECT] key on the operation panel of the machine, and then press the [CLEAR] key (C) or the [CLEAR ALL] key (CA).**

2 **"CANCEL PRINT JOB?" will appear in the display. Make sure that a checkmark appears in front of "YES" and press the [ENTER] key.**

Caution When the machine is connected to your computer using the USB 2.0 (Hi-Speed) ports on each, be sure to read "System requirements for USB 2.0 (Hi-Speed mode)" in the Operation Manual.

When "Paper Source" is set to "Auto Select"

If "Paper Source" is set to "Auto Select" in the "Paper" tab of the printer driver setup screen and the correct size of paper for a print job is not loaded in the machine, the printing procedure will vary depending on the "FORCED OUTPUT" setting in the user programs (see "USER PROGRAMS" in the Operation Manual).

When "FORCED OUTPUT" is set to "OFF"

Select printer mode with the mode select key on the machine, check the message in the display, load paper in the bypass tray, and then press the [START] key to begin printing.

When "FORCED OUTPUT" is set to "ON"

Printing takes place on the paper loaded in the machine, even though the paper size is different from the print image size.

1 Opening the Printer Driver From the "Start" Button

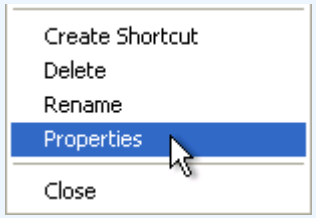
You can open the printer driver and change the printer driver settings from the Windows "start" button. Settings adjusted in this way will be the initial settings when you print from an application. (If you change the settings from the printer driver setup screen at the time of printing, the settings will revert to the initial settings when you quit the application.)

Windows 2000/XP

1 **Click the "start" button, and then click "Control Panel".**
In Windows 2000, click the "Start" button and select "Settings".

2 **Click "Printers and Other Hardware", and then click "Printers and Faxes".**
In Windows 2000, click "Printers".

3 **Click the "SHARP AR-XXXX" printer driver icon and select "Properties" from the "File" menu.**

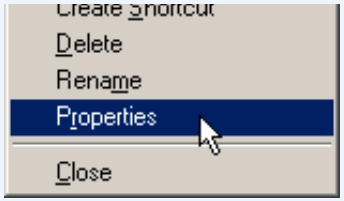


4 **Click the "Printing Preferences" button in the "General" tab.**
The printer driver setup screen will appear.
☞Printer Driver Settings

Windows 95/98/Me/NT 4.0

1 **Click the "Start" button, select "Settings" and then click "Printers".**

2 **Click the "SHARP AR-XXXX" printer driver icon and select "Properties" from the "File" menu.**



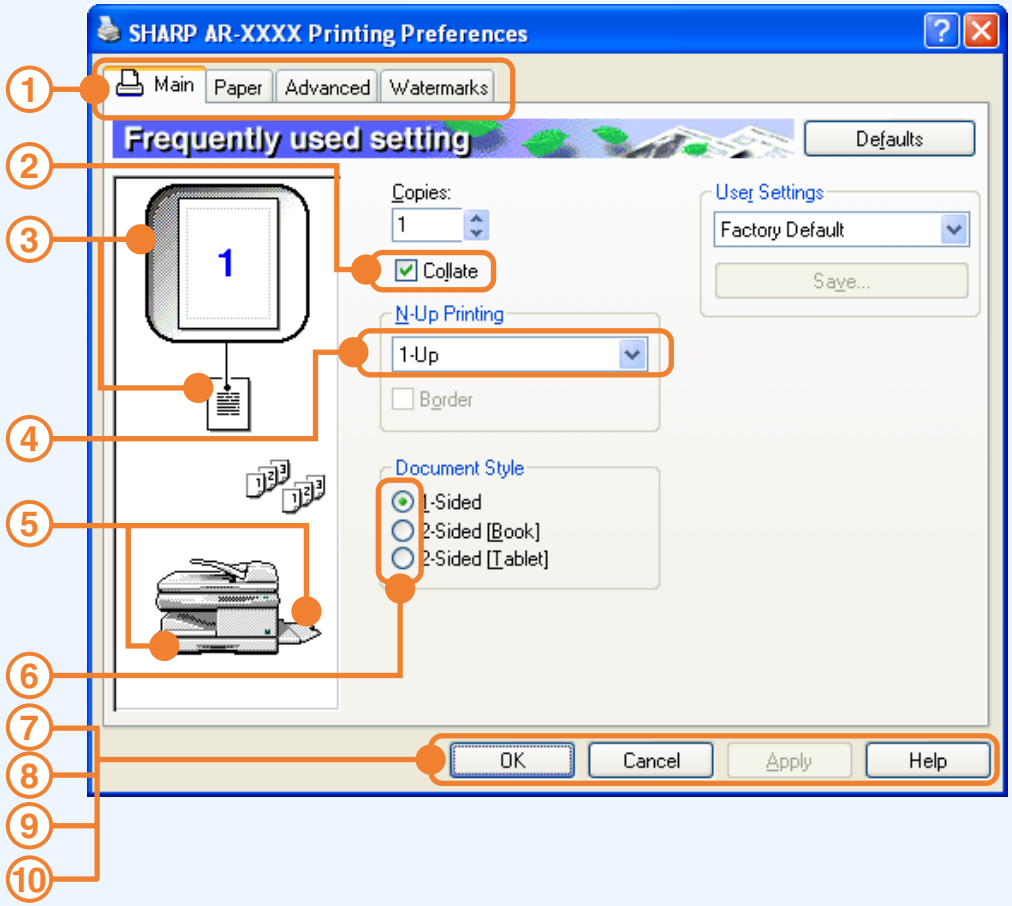
Note: In Windows NT 4.0, select "Document Defaults" to open the printer driver setup screen.

3 **In Windows 95/98/Me, click the "Setup" tab.**

The printer driver setup screen will appear.
☞Printer Driver Settings

Printer Driver Settings

To view Help for a setting, click the ? button in the upper right-hand corner of the window and then click the setting.
Some restrictions exist on the combinations of settings that can be selected in the printer driver setup screen. When a restriction is in effect, an information icon ( ) will appear next to the setting. Click the icon to view an explanation of the restriction.



Note The above screen is the printer driver setup screen for models that support two-sided printing.
The settings and the image of the machine will vary depending on the model.

① Tab
The settings are grouped on tabs. Click on a tab to bring it to the front.

② Checkbox
Click on a checkbox to activate or deactivate a function.

③ Print setting image
This shows the effect of the selected print settings.

④ Drop-down list
Allows you to make a selection from a list of choices.

⑤ Image of paper trays
The tray selected in "Paper Selection" in the "Paper" tab appears in blue. You can also click on a tray to select it.

⑥ Check button
Allows you to select one item from a list of options.

⑦ "OK" button
Click this button to save your settings and exit the dialog box.

⑧ "Cancel" button
Click this button to exit the dialog box without making any changes to the settings.

⑨ "Apply" button
Click to save your settings without closing the dialog box.

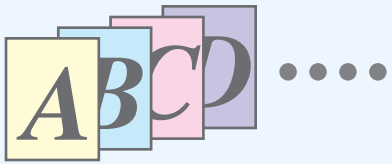
Note Windows NT 4.0 does not have the "Apply" button. The "Apply" button does not appear when you open this window from an application.

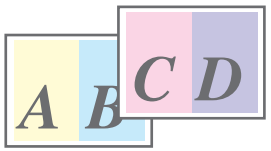
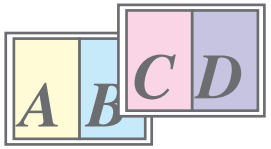
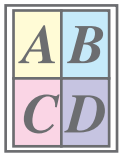
⑩ "Help" button
Click this button to display the help file for the printer driver.

1 Printing Multiple Pages on One Page

This feature allows you to reduce and print two or four document pages on a single sheet of paper.
To use this function, open the printer driver setup screen and select "2-Up" or "4-Up" for "N-Up Printing" on the "Main" tab.
☞See Basic Printing for details on how to open the printer driver.

Note
The "N-Up Printing" setting is not available when "Fit To Paper Size" is selected.
☞Fitting the Printed Image to the Paper



N-Up	☐ Border	☑ Border
"2-Up"		
"4-Up"		

If you select the "Border" checkbox, borderlines will be printed around each page.

1 Fitting the Printed Image to the Paper

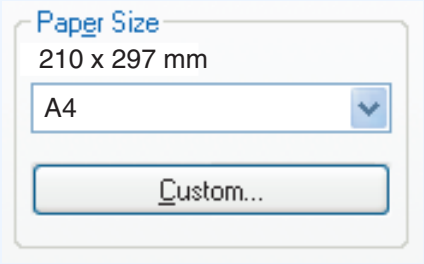
The printer driver can adjust the size of the printed image to match the size of the paper loaded in the machine.
Follow the steps shown below to use this function. The explanation below assumes that you intend to print an A4 size document on an A5 size paper.

☞See Basic Printing for details on how to open the printer driver.

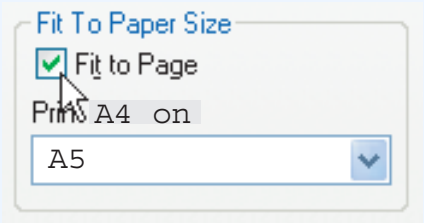
Note
The "Fit To Paper Size" setting is not available when "N-Up Printing" is selected.
☞Printing Multiple Pages on One Page

1 Click the "Paper" tab in the printer driver setup screen.

2 Select the original size (A4) of the print image in "Paper Size".



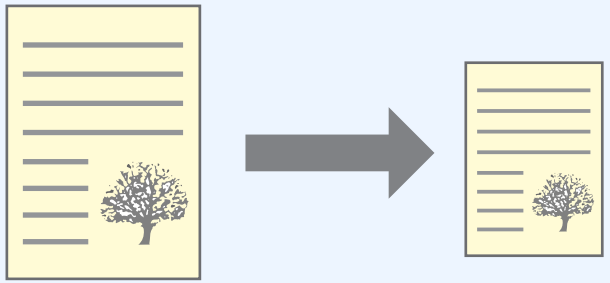
3 Check the "Fit To Page" box.



4 Select the actual size of paper to be used for printing (A5).

The size of the printed image will be automatically adjusted to match the paper loaded in the machine.

Paper Size: A4
Fit To Paper Size: A5



A4 size document (Paper Size)

A5 size paper (Fit To Paper Size)

Note
If "A3 [Fit to Page]", "B4 [Fit to Page]", or "Ledger [Fit to Page]" is selected, the print image is fit to the A4 size even if "Fit to Page" is not selected.

1 Two-sided Printing (Only for models that support two-sided printing)

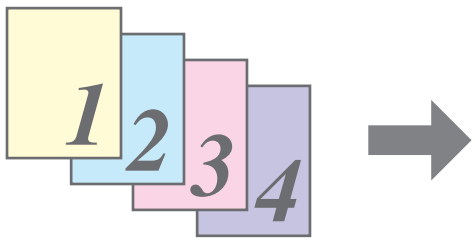
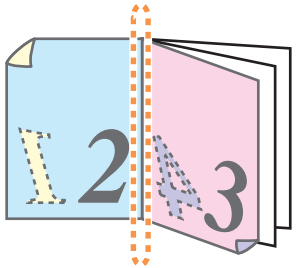
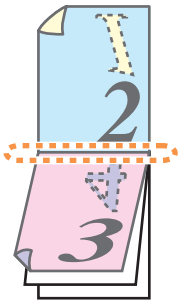
The printer driver setup screen of models that support two-sided printing contains a "Document Style" setting in the "Main" tab. This setting allows you to print on both sides of the paper.
To use this function, open the printer driver setup screen and select "2-Sided (Book)" or "2-Sided (Tablet)" from "Document Style" in the "Main" tab.
☞See Basic Printing for details on how to open the printer driver.

Note

- Paper sizes that can be used for two-sided printing are Letter, Legal, Folio*, Invoice, A4, A5, B5, Foolscap, and 16K.
- When using two-sided printing, select a source other than "Bypass Tray" for the "Paper Source" in the "Paper" tab.

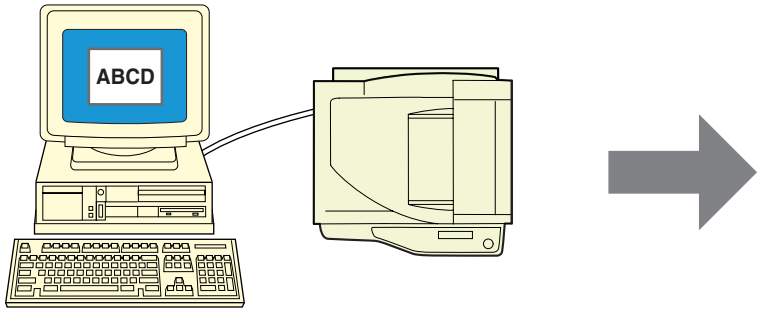
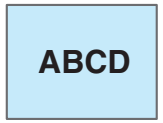
* For two-sided printing on Folio size paper, "Tray 1" or "Tray 2" (if Tray 2 has been installed) must be selected in the "Paper Source" on the "Paper" tab.

The following example shows the result when portrait data is printed on both sides of the paper.

Print data	Printing result	
	2-Sided (Book)	2-Sided (Tablet)
	 The pages are printed so that they can be bound at the side.	 The pages are printed so that they can be bound at the top.

Rotating the Print Image 180 Degrees

The print image can be rotated 180 degrees.
This feature is used to enable correct printing on envelopes and other paper with flaps that can only be loaded in one orientation.
To use the feature, select the image orientation in "Image Orientation" on the "Paper" tab, and then select the "Rotate 180 degrees" checkbox.
☞See Basic Printing for details on how to open the printer driver.

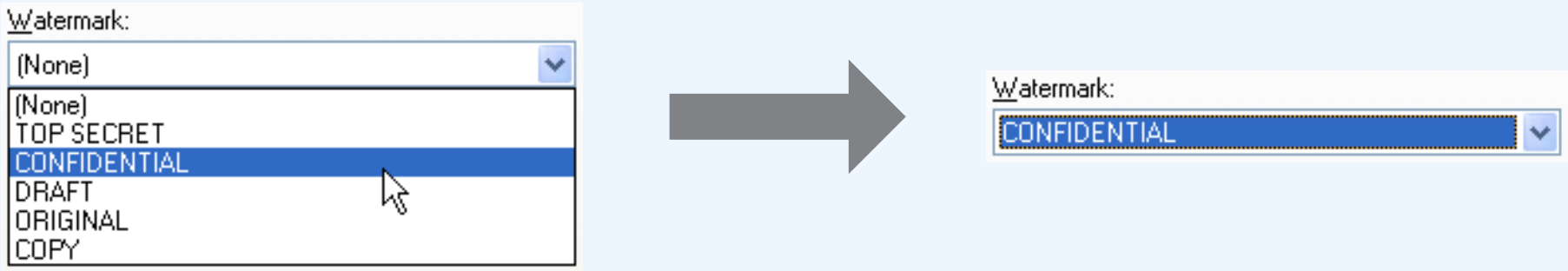
Print data	Printing result	
	Landscape Rotate 180 degrees	Landscape Rotate 180 degrees
		

Printing a Watermark

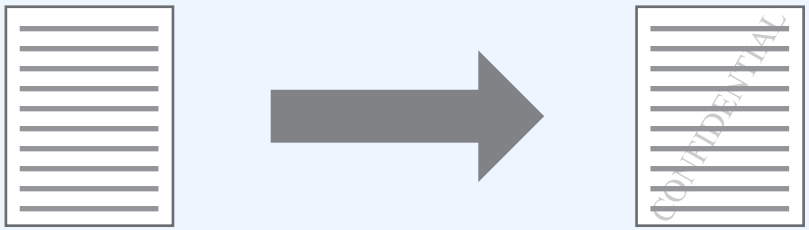
You can print a watermark such as "CONFIDENTIAL" on your document. To print a watermark, open the printer driver, click the "Watermarks" tab, and follow the steps below.
See Basic Printing for details on how to open the printer driver.

How to Print a Watermark

From the "Watermark" drop-down list, select the watermark that you wish to print (for example "CONFIDENTIAL"), and start printing.



Print sample

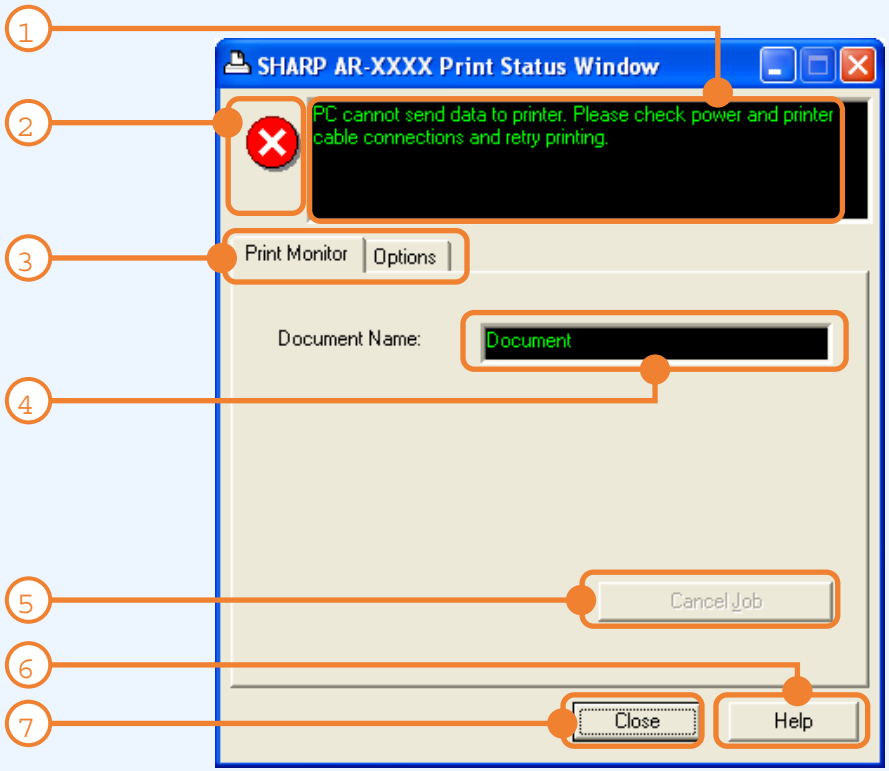


You can enter text to create your own custom watermark. For details on watermark settings, view printer driver Help.
☞Printer Driver Settings

1 Outline of the Print Status Window

When printing begins, the Print Status Window automatically opens.
The Print Status Window is a utility that monitors the machine and shows the name of the document being printed and any error messages that occur.

Note When the machine is used as a network printer, the Print Status Window will not function.



① Status window
Provides information on the current status of the printer.

② Status icon
The status icons appear to alert you to printer errors. Nothing appears when printing is taking place normally. The icons are explained below. Follow the instructions in the status window to solve the problem.

Icon	Print Status
	An error has occurred that requires immediate attention.
	An error has occurred that requires attention soon.

③ Tab
Click a tab to bring it to the front. The "Options" tab allows you to select display options for the Print Status Window.

④ Document Name
Shows the name of the document currently being printed.

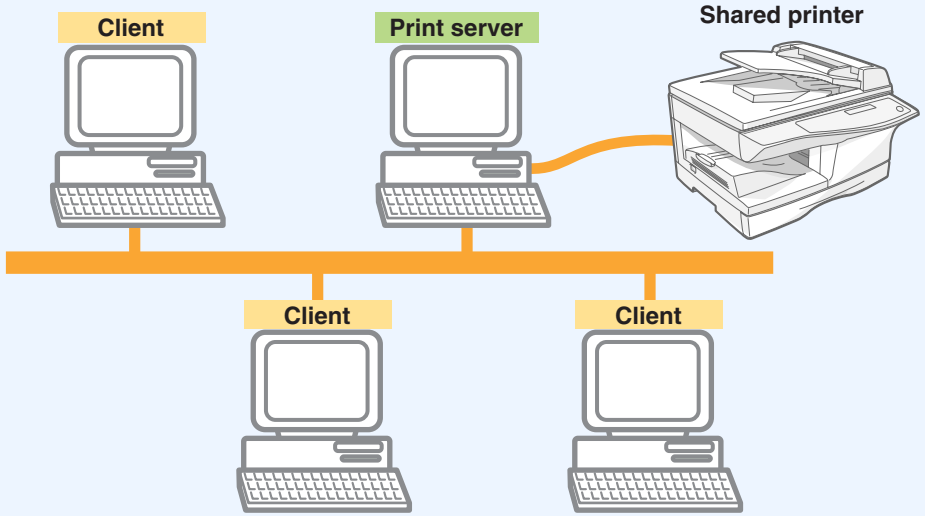
⑤ "Cancel Job" button
Printing can be canceled by clicking this button before the machine receives the job.

⑥ "Help" button
Click this button to display the help file for the Print Status Window.

⑦ "Close" button
Click this button to close the Print Status Window.

Sharing the Printer Using Windows Networking

The machine can be used as a shared printer in a Windows 95/98/Me/NT 4.0/2000/XP network environment.
Note that the Windows network environment must already be established.



"Print server" as explained here is a computer that is directly connected to the machine, and a "Client" is any other computer that is connected to the same network.

☞Shared Printer Settings
(On the print server)

☞ Client Settings

Shared Printer Settings

On the computer to which the machine is directly connected

Follow the steps below to use the computer directly connected to the machine as a print server.
If your operating system is Windows 95/98/Me, start from step 1. If your operating system is Windows NT 4.0, 2000 or XP Home Edition, open the control panel and then start from step 6.

Note If your operating system is Windows XP Professional, refer to the Operation Manual or the help file of your operating system.

1 **Click the "Start" button, select "Settings", and then click "Control Panel".**

2 **Double-click the "Network" icon ( ).**

Note If the "Network" icon does not appear in Windows Me, click "view all Control Panel options".

3 **Click the "File and Print Sharing" button.**

4 **Enable "I want to be able to allow others to print to my printer(s)." by clicking the checkbox, and then click the "OK" button.**

5 **Click the "OK" button in the "Network" dialog box.**

Note If a message appears asking you to restart the computer, click the "Yes" button and restart the computer. Then, open the printer folder and continue the setup procedures from Step 6.

6 **Click "Printers and Other Hardware" in the control panel, and click "Printers and Faxes".**
In operating systems other than Windows XP, double-click the printer icon.

7 **Click the "SHARP AR-XXXX" printer driver icon and select "Sharing" from the "File" menu.**

8 **Establish the settings for sharing, and click the "OK" button.**

Note For information on a setting, click the ? button at the top-right of the dialog box and then click the setting to display Help.

☞Client Settings

2 Client Settings (part 1)

Follow the procedure below to install the printer driver in the client.

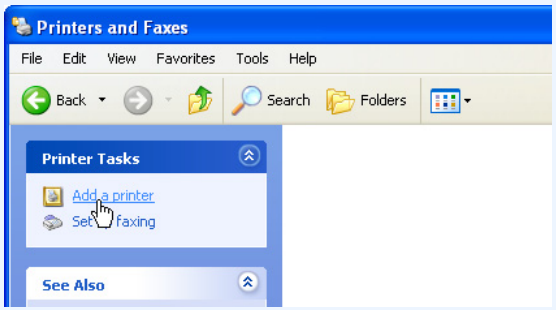
Note

This page provides steps for Windows XP Home Edition users only. If your operating system is Windows 95/98/Me/2000/XP Professional, refer to the Operation Manual or the help file of your operating system.
If your operating system is Windows NT 4.0, refer to "Settings in Windows NT 4.0".

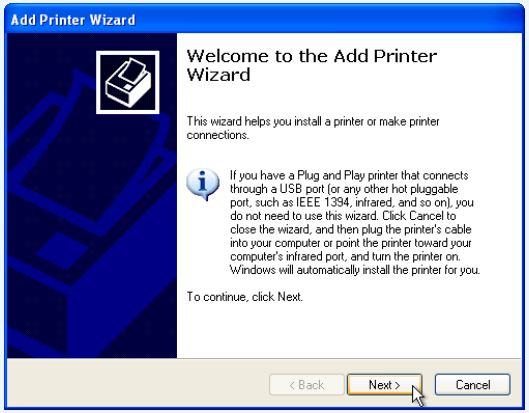
1 **Click the "start" button, and click "Control Panel".**

2 **Click "Printers and Other Hardware", and click "Printers and Faxes".**

3 **Click "Add a printer" in "Printer Tasks".**
The "Add Printer Wizard" will appear.

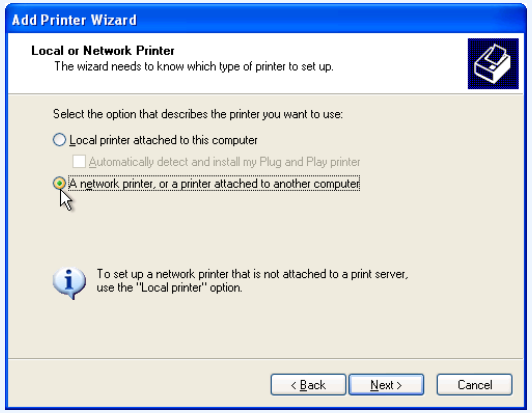


4 **Click the "Next" button.**

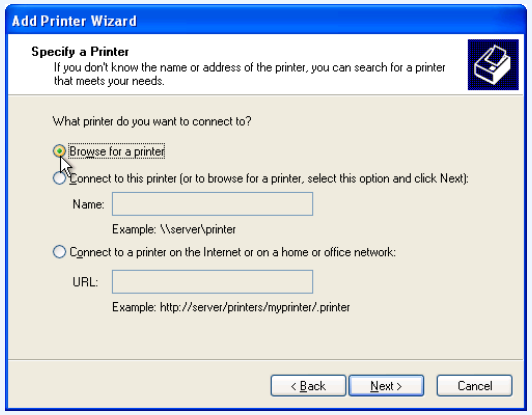

Add Printer Wizard
Welcome to the Add Printer Wizard
This wizard helps you install a printer or make printer connections.
If you have a Plug and Play printer that connects through a USB port (or any other hot pluggable port, such as IEEE 1394, infrared, and so on), you do not need to use this wizard. Click Cancel to close the wizard, and then plug the printer's cable into your computer or point the printer toward your computer's infrared port, and turn the printer on. Windows will automatically install the printer for you.
To continue, click Next.
< Back
Next >
Cancel

Client Settings (part 2)

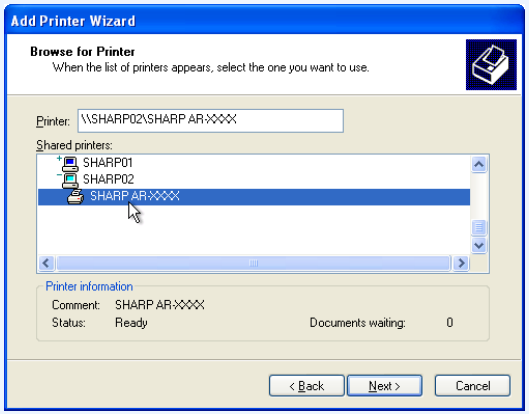
5 Select "A network printer, or a printer attached to another computer", and click the "Next" button.


Add Printer Wizard
Local or Network Printer
The wizard needs to know which type of printer to set up.
Select the option that describes the printer you want to use:
Local printer attached to this computer
Automatically detect and install my Plug and Play printer
A network printer, or a printer attached to another computer
To set up a network printer that is not attached to a print server, use the "Local printer" option.
< Back
Next >
Cancel

6 Select "Browse for a printer", and click the "Next" button.


Add Printer Wizard
Specify a Printer
If you don't know the name or address of the printer, you can search for a printer that meets your needs.
What printer do you want to connect to?
Browse for a printer
Connect to this printer (or to browse for a printer, select this option and click Next):
Name:
Example: \\server\printer
Connect to a printer on the Internet or on a home or office network:
URL:
Example: http://server/printers/myprinter/.printer
< Back
Next >
Cancel

7 Select the printer to be shared in the network, and click the "Next" button.



The contents of this window will vary depending on your network environment.

8 Select settings in the "Default Printer" screen, and click the "Next" button.

9 Click the "Finish" button.

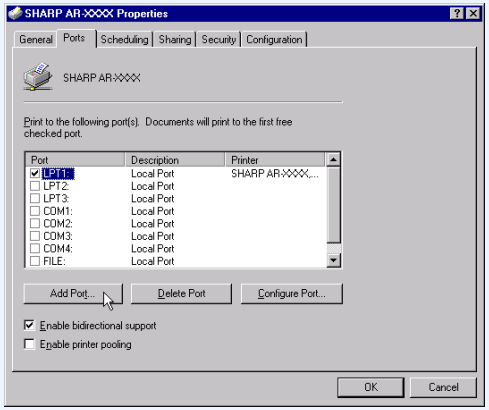
Settings in Windows NT 4.0

If your operating system is Windows NT 4.0, establish settings as follows in the printer properties after installing the printer driver. For the procedure for installing the printer driver, see "INSTALLING THE SOFTWARE" in the Software Setup Guide.

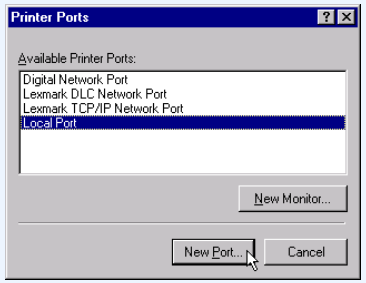
1 **Click the "Start" button, select "Settings", and then click "Printers".**

2 **Click the "SHARP AR-XXXX" printer driver icon and select "Properties" from the "File" menu.**
The printer properties will appear.

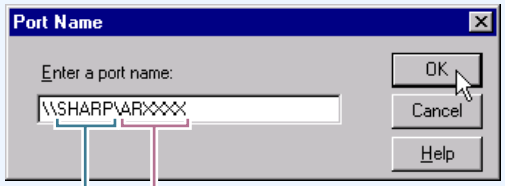
3 **Click the "Ports" tab, and click the "Add Port" button.**
The "Printer Ports" dialog box will appear.



4 **Select "Local Port" in the "Available Printer Ports" list, and click the "New Port" button.**
The "Port Name" dialog box will appear.



5 **Enter "\\(name of server connected to machine)\(name of shared printer)", and click the "OK" button.**



name of shared printer

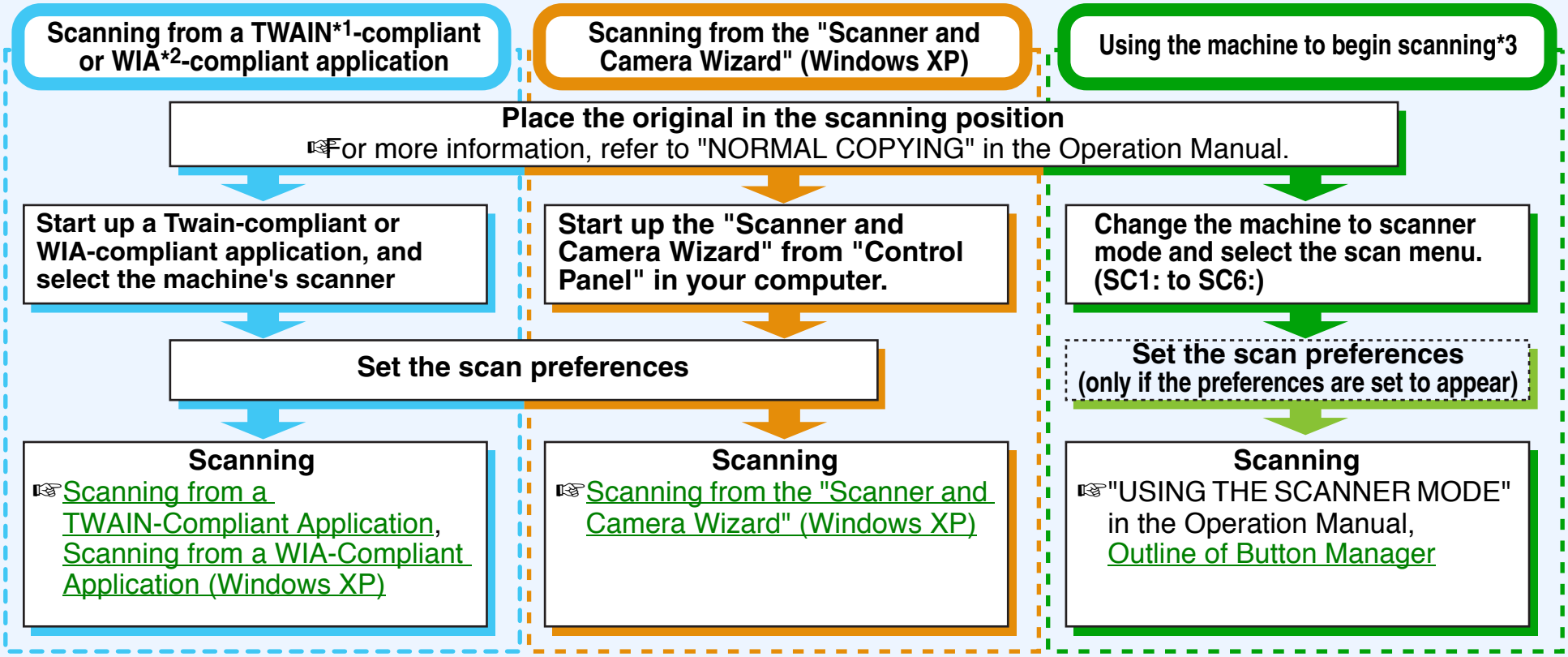
name of server connected to machine

6 **Click the "Close " button in the Printer Ports Window. Then click the "OK" button in the printer properties window.**

Scanning Overview

The flow chart shown below provides an overview of scanning.

Caution The scanning function can only be used when your computer is connected to the machine by a USB cable.


Scanning from a TWAIN*1-compliant or WIA*2-compliant application
Scanning from the "Scanner and Camera Wizard" (Windows XP)
Using the machine to begin scanning*3
Place the original in the scanning position
☞For more information, refer to "NORMAL COPYING" in the Operation Manual.
Start up a Twain-compliant or WIA-compliant application, and select the machine's scanner
Start up the "Scanner and Camera Wizard" from "Control Panel" in your computer.
Change the machine to scanner mode and select the scan menu. (SC1: to SC6:)
Set the scan preferences
Set the scan preferences (only if the preferences are set to appear)
Scanning
☞Scanning from a TWAIN-Compliant Application, Scanning from a WIA-Compliant Application (Windows XP)
Scanning
☞Scanning from the "Scanner and Camera Wizard" (Windows XP)
Scanning
☞"USING THE SCANNER MODE" in the Operation Manual, Outline of Button Manager

*1 TWAIN is an international interface standard for scanners and other image acquisition devices. By installing a TWAIN driver on your computer, you can scan and work with images using a variety of TWAIN-compliant applications.

*2 WIA (Windows Imaging Acquisition) is a Windows function that allows a scanner, digital camera or other imaging device to communicate with an image processing application. The WIA driver for this machine can only be used in Windows XP.

*3 To scan using the machine's operation panel, you must first install Button Manager and establish the appropriate settings in the Control Panel. For details, see "SETTING UP BUTTON MANAGER" in the Operation Manual.

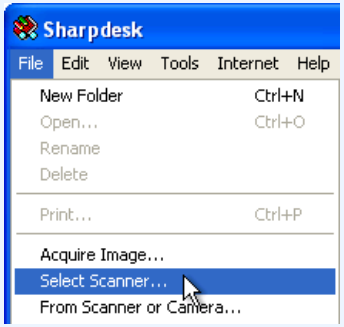
3 Scanning from a TWAIN-Compliant Application (part 1)

The SHARP scanner driver is compatible with the TWAIN standard, allowing it to be used with a variety of TWAIN-compliant applications. Below is a step-by-step guide for acquiring a scanned image to the Sharpdesk desktop screen using Sharpdesk.

1 Place the original(s) that you wish to scan on the document glass/SPF/RSPF.

☞For information on setting an original for scanning, refer to "NORMAL COPYING" in the Operation Manual.

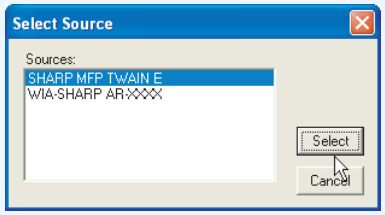
2 Start Sharpdesk and then click the "File" menu and select "Select Scanner".



Note

The method for accessing "Select Scanner" depends upon the application. For more information, refer to the manual or the help file of your application.

3 Select "SHARP MFP TWAIN E", and click the "Select" button.



Note

- If you are using Windows XP, you can also select "WIA-SHARP AR-XXXX" to scan using the WIA driver.
  ☞Scanning from a WIA-Compliant Application (Windows XP)
- Depending on your system, "SHARP MFP TWAIN E 1.0 (32-32)" and "WIA-SHARP AR-XXXX 1.0 (32-32)" may appear in the above "Select Source" screen.

3 Scanning from a TWAIN-Compliant Application (part 2)

4 Select "Acquire Image" from the "File" menu, or click the "Acquire" button ( ).

The scanner driver setup screen will appear.

☞Scanner Driver Settings

5 In the "Scanning Position" menu, select the location where you placed the original in Step 1.

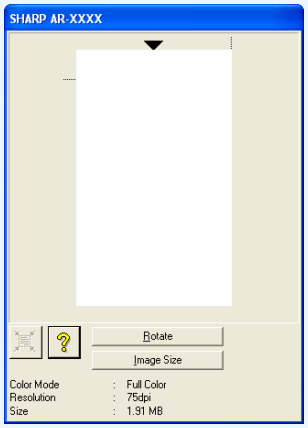
- If you placed a one-sided original in the SPF/RSPF, select "SPF (Simplex)".

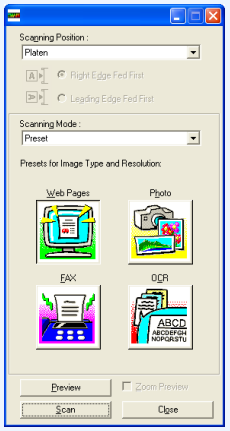
When using the RSPF:

If you placed a two-sided original in the RSPF, select "SPF (Duplex-Book)" or "SPF (Duplex-Tablet)" according to the binding position of the original.

Note

If you selected "SPF (Duplex-Book)" or "SPF (Duplex-Tablet)" in the "Scanning Position" menu, select whether the orientation of the placed original is "Right Edge Fed First" or "Leading Edge Fed First".





6 Click the "Preview" button.

The preview image will appear.

Note

- If the angle of the image is not correct, reset the original, and click the "Preview" button again.
- If the preview image is not oriented correctly, click the "Rotate" button in the preview screen. This rotates the preview image 90 degrees clockwise, allowing you to correct the orientation without resetting the original.

☞Preview screen

- If you set multiple pages in the SPF/RSPF, the machine previews only the top page of the originals, and then sends it to the original exit area. Return the previewed original to the SPF/RSPF before starting the scanning job.

Scanning from a TWAIN-Compliant Application (part 3)

7 Specify the scanning area and set the scan preferences.

For information on specifying the scan area and setting the scan preferences, see scanner driver Help.

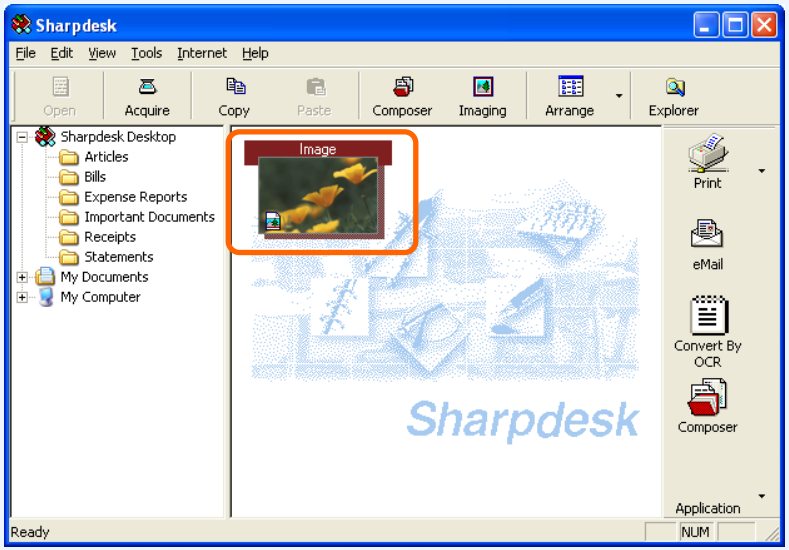
☞Scanner Driver Settings

Caution Scanning a large area in full color at high resolution results in a large quantity of data and a prolonged scanning time. It is recommended that you set appropriate scanning preferences for the type of original being scanned, i.e., Web page (monitor), Photo, FAX, or OCR.

8 When you are ready to begin scanning, click the "Scan" button.

To cancel a scanning job after clicking the "Scan" button, press the [Esc] key on your keyboard.

When you close the scanner driver after scanning, the image data will appear as a new file in Sharpdesk, as shown below.

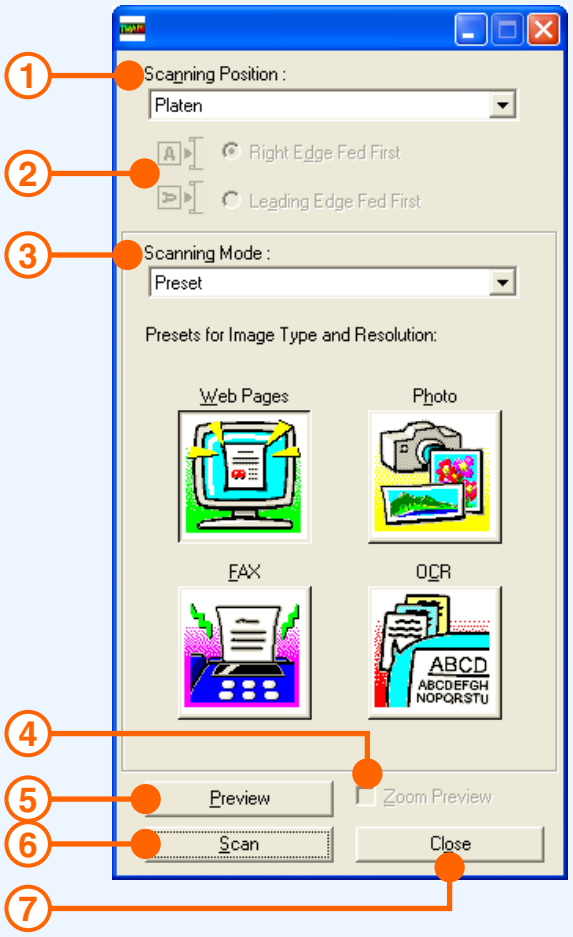


Scanning from a TWAIN-Compliant Application (part 4)

Scanner Driver Settings

The scanner driver setup screen consists of the "Set-up screen", which lets you select scan settings, and the "Preview screen", which shows the scanned image. For details on the scan settings, click the "Help" button in the preview screen to display Help.

Set-up screen



① "Scanning Position" menu

Select the location where the original is placed. Selections are "Platen" (document glass), "SPF (Simplex)", "SPF (Duplex-Book)" or "SPF (Duplex-Tablet)".

☞Scanning from a TWAIN-Compliant Application

② Scan side menu (Only appears if the machine has an RSPF)

If you placed a two-sided original in the RSPF, select "Right Edge Fed First" or "Leading Edge Fed First" from the scan side menu according to the orientation of the placed original.

③ "Scanning Mode" menu

Select "Preset" or "Custom Settings" for the scanning mode. For details on the settings, click the "Help" button in the preview screen to display Help.

④ "Zoom Preview" Checkbox

When this is selected, the selected part of the preview image will be enlarged when the "Preview" button is clicked. To return to the regular view, remove the checkmark.

Note "Zoom Preview" cannot be used when "SPF" is selected in the "Scanning Position" menu.

⑤ "Preview" button

Previews the document.

Note If "Preview" is canceled by immediately pressing the [Esc] key on your keyboard, or the [CLEAR] key ([C]) or [CLEAR ALL] key ([CA]) on the machine, nothing will appear in the preview screen.

⑥ "Scan" button

Click to scan an original using the selected settings. Before clicking the "Scan" button, make sure the settings are correct.

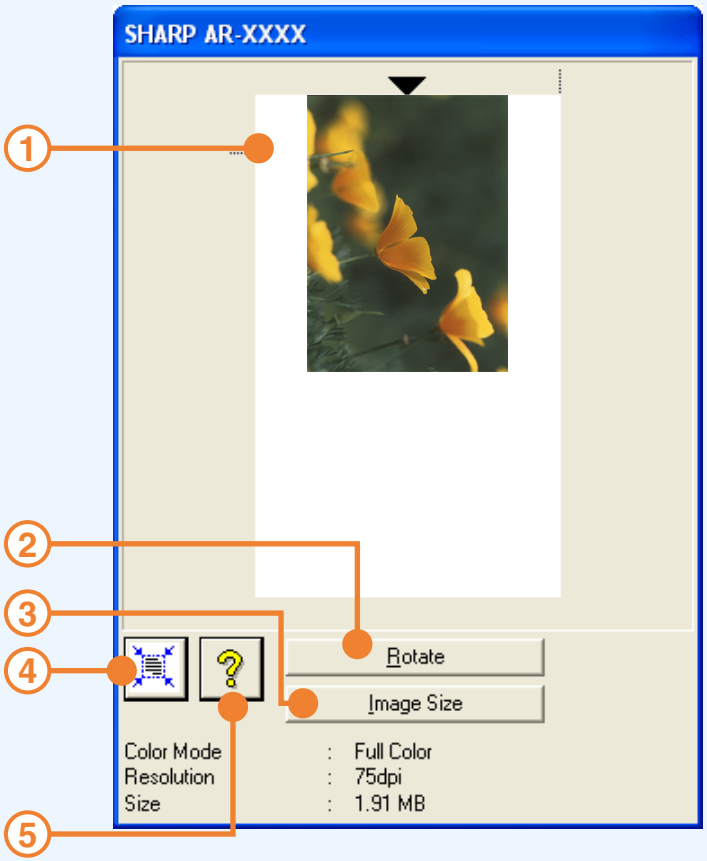
Note To cancel a scanning job after clicking the "Scan" button, press the [Esc] key on your keyboard, or the [CLEAR] key ([C]) or [CLEAR ALL] key ([CA]) on the machine.

⑦ "Close" button

Click to close the scanner driver setup screen.

Scanning from a TWAIN-Compliant Application (part 5)

Preview screen



① Preview window

Click the "Preview" button in the Set-up screen to display the scanned image. You can specify the scanning area by dragging the mouse inside the window. The inside of the frame that is created when you drag the mouse will be the scanning area. To cancel a specified scanning area and clear the frame, click anywhere outside the frame.

② "Rotate" button

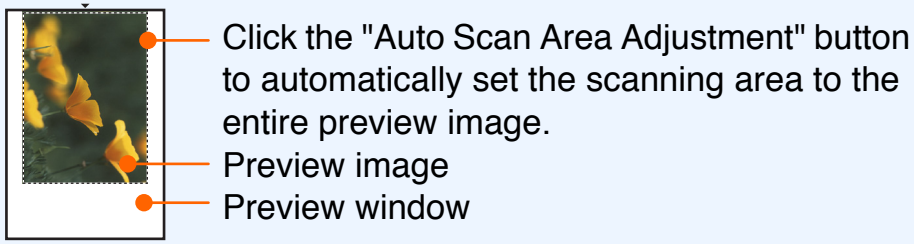
Click to rotate the preview image 90 degrees clockwise. This allows the orientation to be corrected without resetting the original. Upon scanning, the image file is created in the orientation shown in the preview window.

③ "Image Size" button

Click to open a dialog box that allows you to specify the scanning area by entering numbers. Pixels, mm, or inches can be selected for the units of the numbers. By initially specifying a scanning area, numbers can be entered to change that area relative to the top left corner as a fixed origin.

④ "Auto Scan Area Adjustment" button

Click when the preview screen is displayed to automatically set the scanning area to the entire preview image.


Click the "Auto Scan Area Adjustment" button to automatically set the scanning area to the entire preview image.
Preview image
Preview window

⑤ "Help" button

Click to display the help file for the scanner driver.

3 Scanning from a WIA-Compliant Application (Windows XP) (part 1)

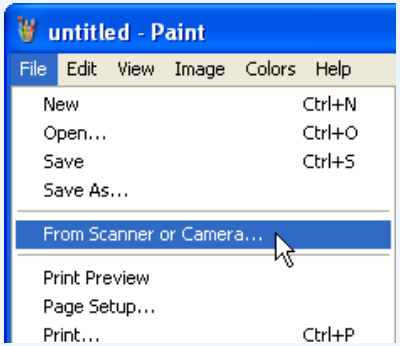
If you are using Windows XP, you can use the WIA driver to scan from Sharpdesk, Paint and other WIA-compliant applications. The procedure for scanning using Paint is explained in the following.

1 Place the original that you wish to scan on the document glass/SPF/RSPF.

☞For information on setting an original for scanning, refer to "NORMAL COPYING" in the Operation Manual.

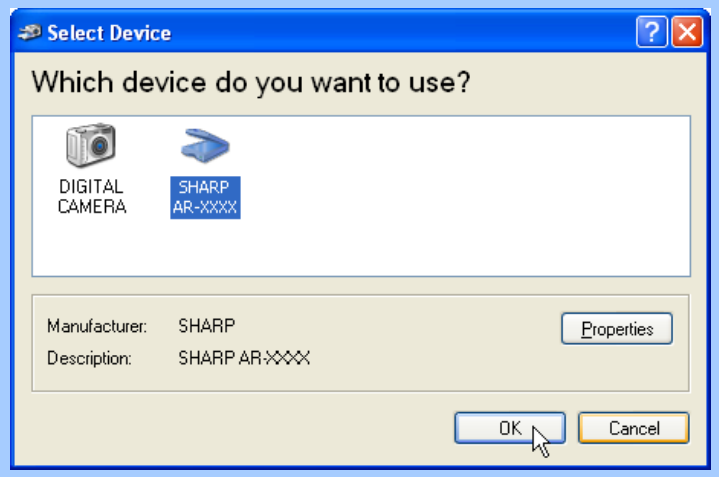
2 Start Paint and then click the "File" menu and select "From Scanner or Camera".

The scan screen of the WIA driver will appear.



Note

If you have WIA drivers for other devices installed in your computer, the "Select Device" screen will open. Select "SHARP AR-XXXX" and click the "OK" button.



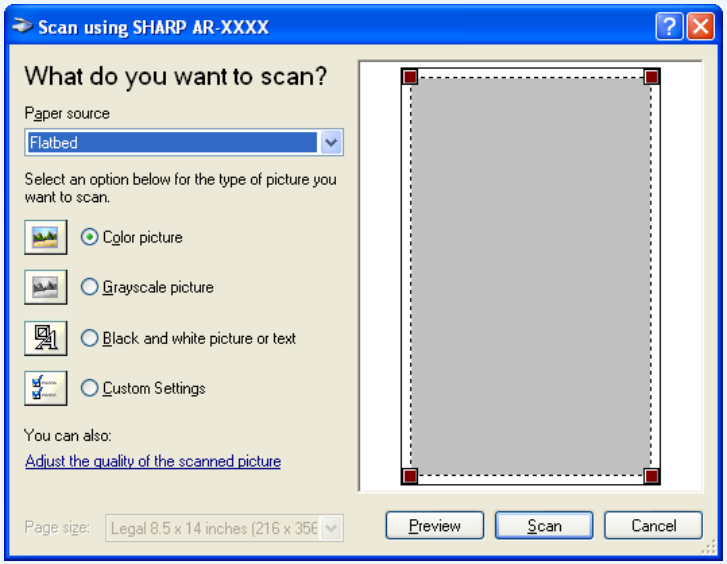
3 Scanning from a WIA-Compliant Application (Windows XP) (part 2)

3 Select the paper source and picture type, and click the "Preview" button.

The preview image will appear.

If you placed the original on the document glass, select "Flatbed" for the "Paper source".

If you placed the original in the SPF/RSPF, select "Document Feeder" for the "Paper source" and specify the original size in "Page size".



Note

- If you select "Document Feeder" for the "Paper source" and click the "Preview" button, the top original in the SPF/RSPF is previewed. The previewed original is sent to the original exit area, so you will need to return it to the SPF/RSPF before starting the scanning job.
- To view Help for a setting, click the ? button in the upper right-hand corner of the window and then click the setting.

4 Click the "Scan" button.

Scanning begins and the image is acquired into Paint.

Use "Save" in your application to specify a file name and folder for the scanned image, and save the image.

To cancel a scanning job after clicking the "Scan" button, click the "Cancel" button.

3 Scanning from the "Scanner and Camera Wizard" (Windows XP) (part 1)

The procedure for scanning with the "Scanner and Camera Wizard" in Windows XP is explained here. The "Scanner and Camera Wizard" lets you scan an image without using a WIA-compliant application.

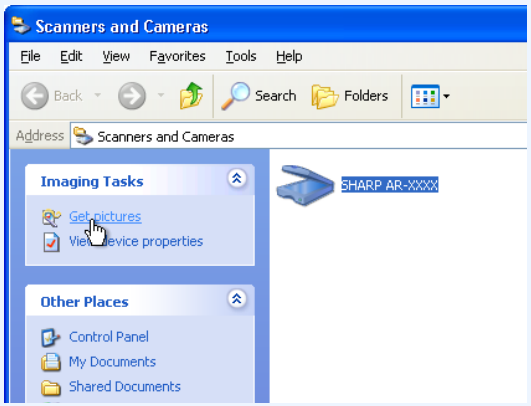
1 **Place the original that you wish to scan on the document glass/SPF/RSPF.**

☞For information on setting an original for scanning, refer to "NORMAL COPYING" in the Operation Manual.

2 **Click the "start" button, click "Control Panel", click "Printers and Other Hardware", and then click "Scanners and Cameras".**

3 **Click the "SHARP AR-XXXX" icon and then click "Get pictures" in "Imaging Tasks".**

The "Scanner and Camera Wizard" will appear.



4 **Click the "Next" button.**

Scanner and Camera Wizard
Welcome to the Scanner and Camera Wizard
SHARP AR-XXXX
This wizard helps you copy pictures from your camera, scanner, or other device to your computer, your network, or the Web.
To continue, click Next.
< Back
Next >
Cancel

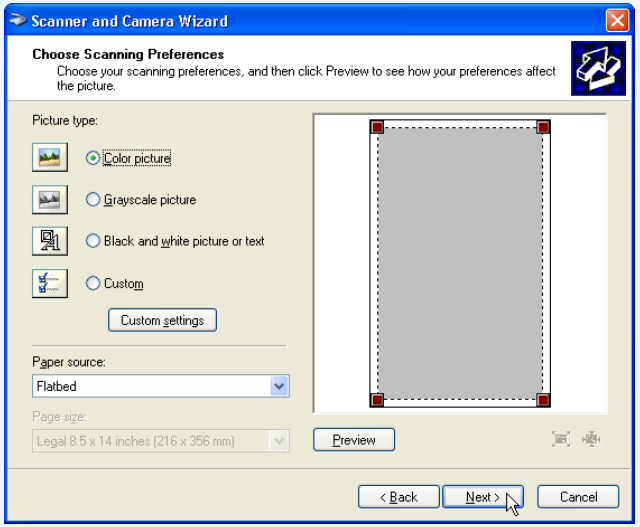
3 Scanning from the "Scanner and Camera Wizard" (Windows XP) (part 2)

5 Select the "Picture type" and "Paper source", and click the "Next" button.

If you placed the original on the document glass, select "Flatbed" for the "Paper source".

If you placed the original in the SPF/RSPF, select "Document Feeder" for the "Paper source" and specify the original size in "Page size".

You can click the "Preview" button to display the preview image.

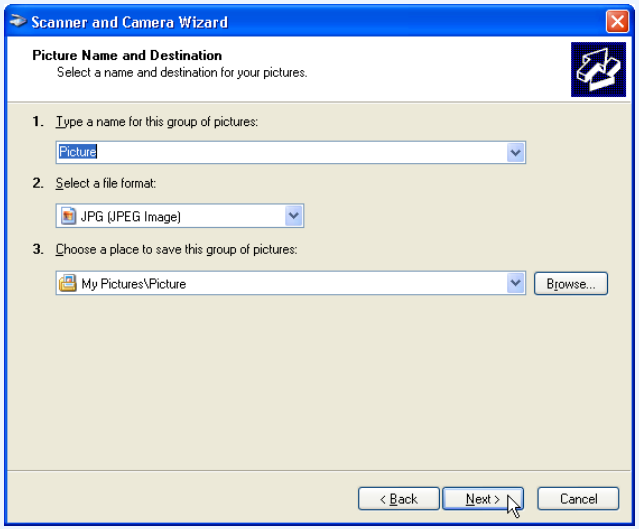


Note

- If you select "Document Feeder" for the "Paper source" and click the "Preview" button, the top original in the SPF/RSPF is previewed. The previewed original is sent to the original exit area, so you will need to return it to the SPF/RSPF before starting the scanning job.
- To adjust the resolution, picture type, brightness and contrast settings, click the "Custom settings" button.

6 Specify a group name, format and folder for saving the image, and then click the "Next" button.

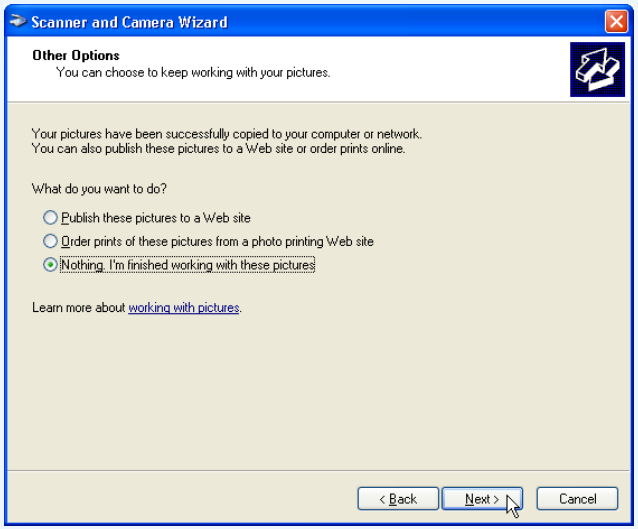
JPG, BMP, TIF or PNG can be selected for the format.
To begin scanning, click the "Next" button.


Scanner and Camera Wizard
Picture Name and Destination
Select a name and destination for your pictures.
1. Type a name for this group of pictures:
Picture
2. Select a file format:
JPG (JPEG Image)
3. Choose a place to save this group of pictures:
My Pictures\Picture
Browse...
< Back
Next >
Cancel

3 Scanning from the "Scanner and Camera Wizard" (Windows XP) (part 3)

7 When scanning ends, the following screen will appear. Select the next task that you wish to perform, and then click the "Next" button.

If you are ready to end the session, click "Nothing. I'm finished working with these pictures".


Scanner and Camera Wizard
Other Options
You can choose to keep working with your pictures.
Your pictures have been successfully copied to your computer or network.
You can also publish these pictures to a Web site or order prints online.
What do you want to do?
Publish these pictures to a Web site
Order prints of these pictures from a photo printing Web site
Nothing. I'm finished working with these pictures
Learn more about working with pictures.
< Back
Next >
Cancel

8 Click the "Finish" button.

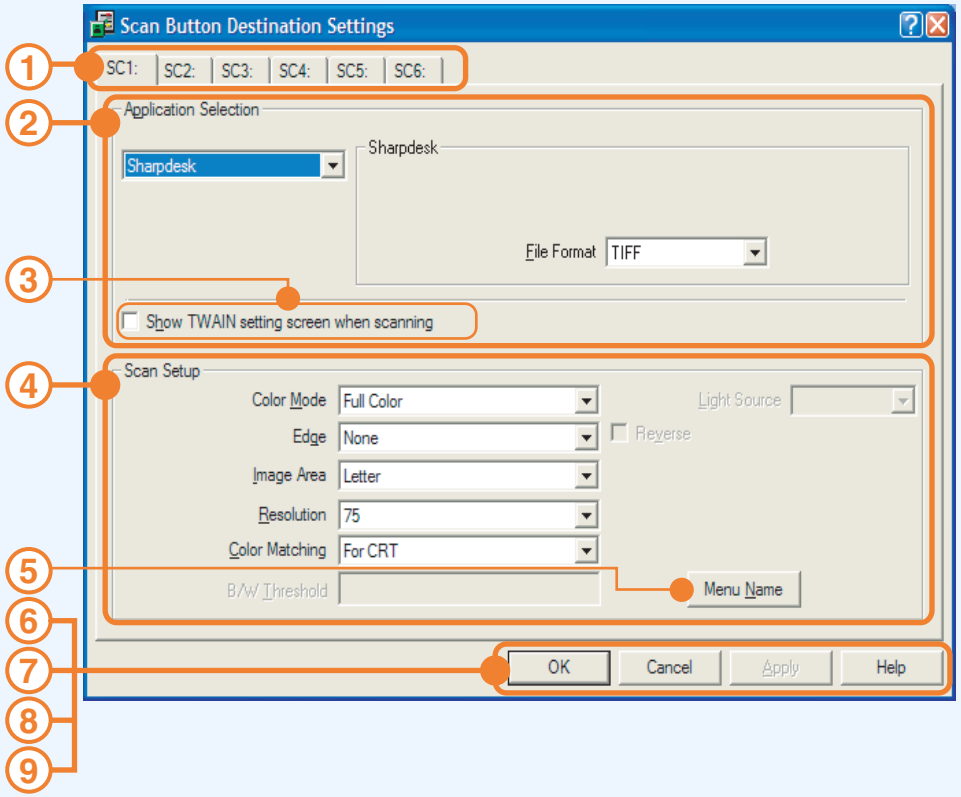
The "Scanner and Camera Wizard" closes and the scanned image is saved in the specified folder.

Scanner and Camera Wizard
Completing the Scanner and Camera Wizard
1 picture(s) were copied.
To see your pictures on your computer or network, click the location below:
My Pictures\Picture
To close this wizard and see your pictures, click Finish.
< Back
Finish
Cancel

3 Outline of Button Manager

Button Manager is a software utility that allows you to use the scanner function at the machine. Button Manager allows you to configure six sets of scanning settings as a scan menu on the machine.
To view Help for a setting, click the ? button in the upper right-hand corner of the window and then click the setting.

☞To begin scanning using the machine's operation panel, settings must be established in the Control Panel after Button Manager is installed. For information on installing Button Manager and establishing the Control Panel settings, see "SETTING UP BUTTON MANAGER" in the Operation Manual. For information on scanning using the machine's operation panel, see "USING THE SCANNER MODE" in the Operation Manual.



① **Tab**
Click to set scan menu options. Each tab contains scan settings for the scan menu.

② **"Application Selection" area**
Select the start-up application here.

③ **"Show TWAIN setting screen when scanning" Checkbox**
You can select whether or not the TWAIN screen is shown. When the checkbox is selected, the TWAIN screen appears when scanning is executed to let you adjust the scanning conditions.

④ **"Scan Setup" area**
Set the scan conditions.

Note
Some applications may limit your choice of settings.

⑤ **"Menu Name" button**
Set the menu names that appear in the machine display. These will also be the tab names of this setting screen.

⑥ **"OK" button**
Click to save your settings and exit the dialog box.

⑦ **"Cancel" button**
Click this button to exit the dialog box without making any changes to the settings.

⑧ **"Apply" button**
Click to save your settings without closing the dialog box.

⑨ **"Help" button**
Click this button to display the help file for Button Manager.

You can use Button Manager to select and change the functions of the six scan menus. Refer to Button Manager Settings.

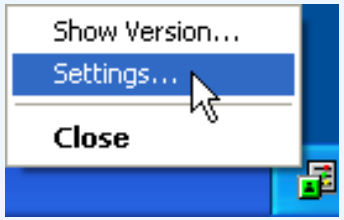
3 Button Manager Settings (part 1)

Once installed, Button Manager normally runs in the background in the Windows operating system. If you need to change Button Manager settings, follow the steps below.
For details on Button Manager settings, see Button Manager Help.

☞Outline of Button Manager

1 Right-click the Button Manager icon ( ) on the task bar, and select "Settings" from the pop-up menu.

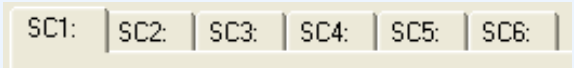
The setting screen of Button Manager will open.



Note

If the Button Manager icon does not appear on the task bar, click the "start" button, select "All Programs" ("Programs" in Windows 98/Me/2000), select "Sharp Button Manager E", and then click "Button Manager" to start Button Manager.

2 Click the tab of the scan menu that you want to set up.



3 Select the start-up application in the "Application Selection" area.

Note

- When the "Show TWAIN setting screen when scanning" checkbox is selected, the scan setting screen appears when scanning is executed to let you adjust the scanning conditions.
- When you scan the two-sided originals in the RSPF, only one sided scan can be performed.
- On the applications other than "Fax", the format can be selected in "File Format". The image quality of JPEG format (only can be selected on "Sharpdesk" and "Email") is not as high as the other formats.

Button Manager scan menu (factory default)

Display/Button Manager menu	Application that starts
SC1:	Sharpdesk
SC2:	Email
SC3:	FAX
SC4:	OCR
SC5:	Microsoft Word
SC6:	Filing

Button Manager Settings (part 2)

4 Set up the "Color Mode", "Edge" and other scan settings in the "Scan Setup" area.

The tab names are initially "SC1:" to "SC6:". To assign a name to a tab, click the "Menu Name" button and enter the desired name.

After entering the name, click the "Apply" button or the "OK" button in the setting screen. The assigned names will appear in the machine display when you select a scan menu at the machine. (Example: SC1:xxxxx)

Note

If a character that the machine cannot display is entered in the "Menu Name", "?" is displayed on the machine.

5 Click the "OK" button.

This completes the settings.

Troubleshooting (part 1)

If you experience difficulty using the machine, check the following troubleshooting guide before calling for service.
Many problems can be easily resolved by the user. If you are unable to solve the problem using the troubleshooting guide, turn off the power switch and unplug the machine, and contact your SHARP service center.

PRINTING AND SCANNING PROBLEMS

In addition to this section, troubleshooting information can also be found in the README files for each of the software programs. The README file (readme.txt) is copied to your computer when the software is installed, and can be found in the "Program Files" - "SHARP" - "ARM150168" folder on the drive where you installed the software.

Problem	Cause and solution	Page
The machine does not print.	**The machine is not correctly connected to your computer.** → Check both ends of the USB cable or Parallel cable and make sure you have a solid connection. Try a known good cable.	Operation Manual
	If the machine is used as a shared printer, the name of the computer to which the machine is connected or the share settings have changed. → Reconfigure the port setting of the shared printer.	-
	The machine is not selected in the application. → After choosing "Print" from the "File" menu, make sure that "SHARP AR-XXXX" is selected as the printer in the "Print" window.	-

Troubleshooting (part 2)

Problem	Cause and solution	Page
The machine does not print.	**The printer driver has not been installed properly.** → Follow these steps to check and see if the printer driver is installed. 1 Click the "start" button, click "Control Panel", click "Printers and Other Hardware", and then click "Printers and Faxes". (On Windows 95/98/Me/NT 4.0/2000, click the "Start" button, select "Settings" and then click "Printers".) 2 Does the "SHARP AR-XXXX" printer driver icon appear? 3 If the icon is shown but you still cannot print, the printer driver may not have been installed correctly. In this case, delete "SHARP AR-M150/168 Series MFP Driver" and then reinstall it.	Operation Manual
	A copy job is in progress. → Wait until the copy job is finished.	-
	The size of paper loaded in the tray is different from the paper size setting in the machine. → Make sure that the size of paper loaded in the tray and the machine's paper size setting agree.	Operation Manual
	The specified size of paper has not been loaded. → Load the specified size of paper in the paper tray.	Operation Manual
	The "FORCED OUTPUT" setting is set to "OFF". → When "FORCED OUTPUT" is set to "OFF" and there is no paper in the machine that is the same size as the print image, load paper in the bypass tray as instructed by the message in the display and press the [START] key to begin printing. (The bypass tray cannot be used for two-sided printing.) If "FORCED OUTPUT" is set to "ON", the job will be printed on the paper in the machine even though it is a different size.	6

Troubleshooting (part 3)

Problem	Cause and solution	Page
Printing is slow.	**Simultaneous use of two or more application software programs.** → Start printing after quitting all unused application software programs.	-
The printed image is light and uneven.	**The paper is loaded so that printing takes place on the back side of the paper.** → Some paper types have a front and back side. If the paper is loaded so that printing takes place on the back side, toner will not adhere well to the paper and a good image will not be obtained.	Operation Manual
The printed image is dirty.	**You are using paper that is outside the specified size and weight range.** → Use copy paper within the specified range.	Operation Manual
	Paper is curled or damp. → Do not use curled or crimped paper. Replace with dry copy paper. During periods when the machine is not used for a long time, remove the paper from the tray and store it in a dark place in a bag to prevent moisture absorption.	-
	You did not set sufficient margins in the paper settings of your application. → The top and bottom of the paper may be dirty if the margins are set outside of the specified print quality area. → Set the margins in the software application within the specified print quality area.	-
The printed image is skewed or it runs off the paper.	**The size of paper loaded in the tray is not the size specified in the printer driver.** → Check if the "Paper Size" options suit the size of paper loaded in the tray. → If the "Fit To Page" setting is activated, make sure that the paper size selected from the drop-down list of the "Fit To Paper Size" option is the same as the size of the loaded paper.	-

Troubleshooting (part 4)

Problem	Cause and solution	Page
The printed image is skewed or it runs off the paper.	**The orientation of document setting is not correct.** → Click the "Paper" tab in the printer driver setup screen, and verify if the "Image Orientation" option is set to your requirements.	-
	Paper is not loaded properly. → Make sure the paper is properly loaded.	-
	You did not correctly specify the margins in the application. → Check the layout of the document margins and the paper size settings in the application you are using. Also check if the print settings are specified correctly to suit the paper size.	-
Error indicator is lit or blinking.	**See "DISPLAY MESSAGES" to check the meaning of the error indicator and error message in the display, and take appropriate action.**	Operation Manual
Poor scanning quality.	**The document glass or the underside of the SPF/RSPF is dirty.** → Clean regularly.	Operation Manual
	The original is dirty or rough. → Use a clean original.	-
	You have not specified a suitable resolution. → Make sure that the resolution setting in the scanner driver is appropriate for the original.	-

Troubleshooting (part 5)

Problem	Cause and solution	Page
Poor scanning quality.	**You have not specified a suitable value for the "B/W Threshold" setting.** → If you are scanning with a TWAIN-compliant application and are using "Red", "Green" or "Blue" mode from "Light Source" menu, make sure that a suitable value is specified for the "B/W Threshold" setting. A larger threshold value makes your output darker, while a small threshold value makes it lighter. To adjust the threshold automatically, click the "Auto Threshold" button on the "Image" tab of the "Custom Settings" screen.	-
	The brightness and contrast settings are not suitable. → If you are scanning with a TWAIN-compliant application and the resulting image has unsuitable brightness or contrast (for example it is too bright), click the "Auto Brightness/Contrast Adjustment" button on the "Color" tab of the "Custom Settings" screen. Click the "Brightness/Contrast" button to adjust the brightness and the contrast while viewing the scanned output image on the screen. If you are scanning with a WIA-compliant application or the "Scanner and Camera Wizard", click "Adjust the quality of the scanned picture" or the "Custom settings" button, and adjust the brightness and contrast in the screen that appears.	-
	The original is not placed face up in the SPF/RSPF or face down on the document glass. → Place the original face up in the SPF/RSPF or face down on the document glass.	-
	The original was not placed in the correct position. → Place the original correctly.	-
	"Quick Scan" has been selected. → If scanning is performed when the "Quick Scan" option has been selected, image quality may be degraded. This is because the scanned data is transferred using JPEG compression. If image quality is poor, then perform scanning again without selecting the "Quick Scan" option. ("Quick Scan" is not selected by default.)	-

Troubleshooting (part 6)

Problem	Cause and solution	Page
Unable to scan the image.	**If scanning is not possible, shut down your computer, turn off the machine's power switch, and unplug the machine's power cord. Next, start your computer, restore power to the machine, and try scanning again. If scanning is still not possible, check the following items.**	-
	Your application is not TWAIN/WIA compliant. → If your application is not TWAIN/WIA compliant, scanning will not be possible. Make sure your application is TWAIN/WIA compliant.	-
	You have not specified all scanning preferences appropriately. → Scanning a large area in full color at high resolution results in a large amount of data and extended scanning times. The scanning preferences should be set appropriately for the type of original to be scanned, i.e., Web page (monitor), Photo, FAX, or OCR.	-
Scanner transfer speed is slow.	**Your computer does not meet the system requirements for the USB 2.0 interface (Hi-Speed mode).** → See "System requirements for USB 2.0 (Hi-Speed mode)" in the Operation Manual to configure your system as required for USB 2.0, and then set "USB2.0 MODE SWITCH" in the user programs to "HI-SPEED".	Operation Manual

If a Notice Page is printed

If you find that a notice page has been printed at the end of a print job, the print data received from the computer has not been printed as specified.
If the following Notice Page is printed, disable the ROPM function by removing the checkmark from "ROPM" in the "Configuration" tab of the printer driver setup screen. If you wish to use the ROPM function, set the print quality to "Draft".

```
**************************************************
                  Notice Page
**************************************************

   The IMC memory full error had occurred,
a normal output was not able to be executed.

   Please refer to the operation manual for
the solution method.
```

Note The IMC memory is used to store print data when the ROPM function is used. This memory is also used to store original image data in copy mode. The percentage of IMC memory allocated to the printer function can be adjusted on the "MEM. FOR PRINTER" setting in the user programs (see "USER PROGRAMS" in the Operation Manual).

Printer Driver Features (part 1)

Tab	Setting	Selections	Initial setting
Main	Copies	1 to 999	1
	Collate	On/Off	On
	N-Up Printing	1-Up/2-Up/4-Up	1-Up
	Border	On/Off	Off
	Document Style*1	1-Sided/2-Sided (Book)/2-Sided (Tablet)	1-Sided
	User Settings	-	Factory Defaults
	[User Settings]		
	Setting Name	Up to seven names, 20 characters each	-
Paper	Paper Size	A3 [Fit To Page]*2, A4, A5, A6, B4 [Fit To Page]*2, B5, Ledger [Fit To Page]*2, Letter, Legal, Executive, Invoice, Foolscap, Folio, COM10, Monarch, DL, C5, 8K [Fit To Page]*2, 16K, Custom Paper	A4*3
	Fit To Page	On/Off	Off
	Image Orientation	Portrait/Landscape/Rotate 180 degrees	Portrait
	Paper Source	Auto Select, Tray 1, Bypass Tray	Auto Select
	[Custom]		
	Width	98.3 to 215.9 (mm.)/3.87 to 8.50 (in.)	98.3 (mm.)*3
	Length	148.0 to 355.6 (mm.)/5.83 to 14.00 (in.)	148.0 (mm.)*3
	Size	millimeters/inches	millimeters*3

(continued)

*1 Only for model that support two-sided printing.
*2 Will be reduced toA4 size or the specified size before printing.
*3 This initial setting may vary depending on your operating system settings. For information on each setting, see Help in the printer driver setup screen.

Printer Driver Features (part 2)

Tab	Setting	Selections	Initial setting
Advanced	Print Quality	Draft/Normal/Photo	Normal
	2 Gradation Print	On/Off	Off
	[Image Adjustment]		
	Brightness	0 to 100	50
	Contrast	0 to 100	50
Watermarks	Watermark	(None)/TOP SECRET/CONFIDENTIAL/DRAFT/ORIGINAL/COPY	(None)
	Text	-	-
	Size	6 to 300	200
	Angle	-90 to +90	+45
	Gray Scale	0 to 255	192
	On First Page Only	On/Off	Off
Configuration	Input Tray Options	One tray/Two trays	One Tray
	ROPM	On/Off	On

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For detailed information on the settings in the printer driver, Print Status Window, scanner driver, and Button Manager, see the help files for each.

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